


DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER PROGRAM COORDINATION
MEMORANDUM

P. O. Box 10009

Richmond, VA 23240-0009

SUBJECT: Guidance Memo No. 01-2016
Implementation Guidance for Reissuance of the General VPDES Permit for Domestic Sewage Discharges of Less Than or Equal to 1,000 Gallons Per Day

TO: Regional Directors

FROM: Larry G. Lawson, P.E. 

DATE: May 17, 2001

COPIES: Regional Permit Managers, Regional Compliance and Enforcement Managers, Regional Water Permit Managers, Mary Jo Leugers, Martin Ferguson, Paul Herman, OWPP Staff

On March 26, 2001, the State Water Control Board adopted the amended General VPDES Permit Regulation (9 VAC 25-110-10 et seq.) that will allow the reissuance of the subject general permit. The general permit will be effective on August 1, 2001 and it expires on August 1, 2006. Copies of the final regulation, the general permit, the fact sheet, and the registration statement and instructions are attached for your information. The purpose of this memo is to identify the changes that have been made in the reissued general permit and to provide the permit writers with some guidance on how to implement it.

Local Government Notification

In the case of a sewage discharge into a water impoundment (e.g., lake), § 62.1-44.15:3 of the Code of Virginia, enacted by the 2000 General Assembly, requires a notification from the local government that the location and operation of the discharging facility are consistent with applicable ordinances adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2. This provision only applies to any proposed facility or any facility that has never been covered under a VPDES permit. Therefore, the regions should process coverage renewal without requiring a local government ordinance form (LGOF). As a result of recent statutory changes (2001 General Assembly), this requirement will no longer be valid as of July 1, 2001, and the new local government notification requirement will only apply to new individual VPDES permits. In order to ensure that the general permit regulation is consistent with the statute, the staff intends to revise the regulation through a technical amendment procedure before it becomes effective on August 1. Additional guidance will be provided once the amendment process is complete.

Maintenance Contract Requirement

The maintenance contract requirement is not new to the owners of single family home facilities since it has already been required by the Virginia Department of Health's (VDH's) Alternative Discharging Sewage Treatment Regulations for Single Family Dwellings (12 VAC 5-640-10 et seq.). By

incorporating this requirement into the general permit, it not only addresses the concern of inequity between the owners of single family homes and non-single family homes, but also helps ensure that all treatment works are properly operated and maintained. For existing facilities seeking coverage renewal, a copy of a valid maintenance contract must be included with the registration statement. The registration statement is not deemed complete and coverage under the general permit cannot be issued until a copy of a valid contract is submitted. As a permit condition, for proposed facilities, a copy of the contract must be submitted to the Department prior to operation. Although a formal review and approval of the maintenance contract is not required by the general permit regulation, it is deemed noncompliance of the general permit whenever the specified requirements for the maintenance contract are not met, a valid contract is not available onsite for inspection or, for proposed facilities, a valid contract is not obtained prior to operation. Enforcement actions could be taken under such circumstances.

Operation and Maintenance Plan

In lieu of obtaining a maintenance contract, the permittee may opt to submit an Operation and Maintenance Plan to the Department for review and approval. This option is also consistent with VDH's regulations that provide for variances. In order to pursue this option, for existing facilities, a plan must be submitted with the registration statement. For proposed facilities, a plan must be submitted to and approved by the Department prior to operation. If an Operation and Maintenance Plan is not approved and the facility is in operation, enforcement actions could be taken. The permittee may also pursue this option anytime during the term of coverage. Granting an exception to the maintenance contract requirement and approval of the Operation and Maintenance Plan should be handled through the transmittal letter for general permit coverage or, for proposed facilities and other facilities that pursue this option during the coverage term, through an approval letter (see attachments) from the regional water permit manager to the permittee. Should the permittee fail to implement the approved plan or if there are violations of effluent limitations, a maintenance contract could be required at the staff's discretion.

Permit writers should ensure all specified requirements in the plan are met. For existing facilities seeking coverage renewal, the registration statement should not be deemed complete and coverage under the general permit should not be issued until all these requirements are satisfied. The actual maintenance log is not expected to be included in the plan. A copy of example pages that contain necessary information would suffice. Proof of installation of a non-resettable elapsed time meter may include a copy of receipt from manufacturers or vendors. The purpose of this requirement is to ensure that all mechanical driven units in the treatment works are kept in continuing operation mode except during repair or maintenance period.

Discharge Categories, Flow Frequency Determination and Dechlorination

The two subcategories of discharges have been redefined in the general permit due to the change in the Water Quality Standards (9 VAC 25-20-5 et seq.) regarding chlorine. Specifically, exceptions to the standard and the case-by-case determination based on reasonable beneficial uses of the receiving waters have been eliminated. Therefore, in the dry ditch situation, regardless of the distance to a perennial stream, the standard must be met at the end of the pipe. This approach is consistent with the agency's implementation procedure for other toxic pollutants.

Subcategory I now includes discharges to receiving waters where the 7Q10 flows are less than 0.2 MGD. Subcategory II includes discharges to receiving waters where the 7Q10 flows are equal to or greater than 0.2 MGD. Based on the receiving water information provided in the registration statement, the permit

writer should determine the flow frequency in accordance with Paul Herman's memos (attached). This will determine which of the two effluent limitation pages is applicable to the facility. The rationale for these two pages is provided in detail in the attached fact sheet. The major difference between the two sets of effluent limits is the way disinfection is handled. Both pages require a 1.0 mg/l chlorine residual after the chlorine contact tank, but if the discharge goes into a stream with a 7Q10 of 0.2 MGD or better, dechlorination is not required. In all other cases, the discharge must be dechlorinated to non-detectable level, i.e., less than 0.1 mg/l of total residual chlorine. If the discharge is to a dry ditch or a perennial stream with a 7Q10 less than 0.2 MGD, the limits of Part I, Page 1 of the general permit apply. Facilities that discharge into streams with 7Q10 at or above 0.2 MGD will be regulated by Part I, Page 2 of the general permit. **The copy of the general permit that is sent to the permittee should only contain the applicable Part I A page. In order to avoid confusion, do not send both pages out to the same discharger.**

In cases where discharges are into tidal waters or lakes, dilution necessary to reduce the chlorine concentration to or below the water quality standard is generally not available. Therefore, dechlorination would be required for all such discharges and the limits of Part I, Page 1 of the general permit apply.

If the treatment works is currently covered by the expiring general permit and they have installed dechlorination equipment, then antibacksliding prevents them from discontinuing its use regardless of the 7Q10 of the receiving waters. The choice of dechlorination or not is only applicable to new facilities or to existing ones where the equipment has not been installed.

Part I B 2 of the general permit contains a compliance schedule that allows the permittee 180 days after coverage under the general permit to upgrade the treatment works to meet the permit limits. Due to the change of the chlorine standard, some existing facilities that discharge to a dry ditch which travels at least 500 feet to reach a perennial stream may need to install dechlorination in order to meet the non-detectable limit of total residual chlorine. A determination of the applicability of the compliance schedule should be made when the registration statement is reviewed.

Registration Statement

The registration statement may be used for requesting coverage under the general permit for single family home and non-single family home facilities. For proposed single family home discharges, the VDH's combined form may be used as long as all of the information in the registration statement is provided.

The registration statement has been modified to reflect the changes made in the general permit regulation including those mentioned above. In addition, the owner must indicate if he is or will be the occupant of the facility. This information may facilitate the follow-up inspections. In cases where the facility is a rental property, the owner may be contacted ahead of time in order to review the maintenance contract. The owner must also indicate if the facility has been built or not. This information will determine, where applicable, if antibacksliding applies. The topographic map needs to identify the location of the property to be served by the treatment works. The site diagram needs to identify the property boundaries, the discharge line location and the receiving water body.

Discharges into the following waters are not eligible for coverage under this general permit:

1. Tier 3 waters, as designated under the Water Quality Standards, 9 VAC 25-260-30 A.3.c;
2. James River between Boshier and Williams Dams;

3. Tuckahoe Creek and its tributaries (no new discharges);
4. Potomac River embayments in Virginia from the fall line at Chain Bridge to the Route 301 Bridge;
5. Aquia Creek;
6. Chickahominy Watershed above Walker's Dam;
7. The Dulles Watershed when the discharge would violate the Board's policy on treatment plants in that watershed;
8. The Occoquan Watershed when the discharge would violate the Board's policy on treatment plants in that watershed;
9. Shellfish waters where the discharge will result in condemnation by VDH and the project will have an effect on shellfish use now or in the future; and

For any proposed facility or any facility which has never been covered under a VPDES permit, the following attachments are required to be submitted with the registration statement: 1) a topographic map; 2) a site diagram of the treatment works; 3) a letter from the Health Department stating that onsite treatment options are not available; and 4) if the discharge is into a water impoundment, an LGOF from the local government that the location and operation of the discharging facility are consistent with the local ordinances. The regulation will be amended to delete this LGOF requirement prior to August 1, 2001. For existing facilities that wish to renew coverage under the reissued general permit, a copy of a valid maintenance contract or an Operation and Maintenance Plan is required to be submitted with the registration statement.

General Permit

The following numbering system has been implemented since the last reissuance of the general permit in 1996. Do not change permit number for existing facilities whose coverage is being renewed under the reissued permit.

The permit number, VAG40, leaves four spaces for individual discharge identification. The regions are requested to assign numbers sequentially within the following blocks of numbers.

SWRO	0001-0999
VRO	1000-1999 & 8000-8999
WCRO	2000-2999
TRO	3000-3999
PRO	4000-4999
NRO	6000-6999
SCRO	7000-7999

This allows each region 1000 numbers, except SWRO which gets 999 and VRO which gets 2000. If any region should need more, they should contact Martin Ferguson and an additional block of numbers can be assigned. For example, the 10th facility covered by TRO would get number VAG403009.

Individual permit numbers should be typed onto the cover page of the permit. Because this permit was adopted as a regulation, no changes to the language of the general permit are allowed.

Track each facility covered under the general permit in CEDS.

The general permit regulation requires the permittee to notify the Department at least 30 days in advance

for a proposed ownership transfer under the automatic transfer provision. An example change of ownership agreement form is attached to assist the permittee in the transfer process. This form should be provided to the permittee with the transmittal letter for the general permit coverage. Note any change of ownership status in CEDS.

The effective date of the general permit regulation is August 1, 2001, this corresponds to the expiration of the existing general permit. Regions may send coverage renewal reminder letter (see attachment) to the permittees, process the registration statements, and issue coverage under the new general permit any time after May 23 when the final public notice period for the regulation closes, however the effective date of coverage cannot be before August 1.

Coordination with VDH

Collaboration between DEQ and VDH is essential in the registration process. Regions are encouraged to contact the local health departments as soon as possible and make them aware of the changes made in the general permit. Specific procedures including, but not limited to, registration statement review and submittal should be developed based on each region's needs and an agreement reached between the region and the respective health department office. It is important that the owner understands that he has a responsibility under state law to obtain a permit to construct and a permit to operate the treatment works from VDH. A copy of the transmittal letter for general permit coverage should be sent to the respective health department office.

Non-single family home facilities are subject to the requirements set in the Sewerage Regulations and the proposed Sewage Collection and Treatment Regulations. Regions should contact VDH Division of Wastewater Engineering's area engineers (see attachment) on issues regarding plans and specifications, operation and maintenance manual, Certificate to Construct or Certificate to Operate, etc. Should a facility choose to submit an Operation and Maintenance Plan, the staff may consult with VDH prior to granting an approval.

Inspection and Compliance

Since the general permit does not require reporting of the monitoring results, no DMR is sent with the permit. The permittee is required to conduct the monitoring and keep the results available for inspection by DEQ or VDH. A copy of a valid maintenance contract, unless an exception has been granted, must be maintained onsite and made available for inspection.

For single family home facilities, once general permit coverage is issued, the local health department handles inspection and compliance of these facilities per their statutes and regulations. For non-single family home facilities, DEQ is responsible for inspection and compliance. These facilities should be inspected at least once every five years.

If there are any questions about this guidance or the general permit, please contact Lily Choi.

DISCLAIMER

This document provides procedural guidance to the permit staff. This document is guidance only. It does not establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made by applying the State Water Control Law and the implementation regulations on the basis of the site specific facts when permits are issued.

ATTACHMENTS

General Permit Regulation
General Permit
Fact Sheet
Registration Statement and Instructions
Local Government Ordinance Form
Transmittal Letter for General Permit Coverage
O & M Plan Approval Letter
Flow Determination Memos
Change of Ownership Agreement Form
Coverage Renewal Reminder Letter
VDH Division of Wastewater Engineering Area Engineers Listing

COMMONWEALTH OF VIRGINIA
STATE WATER CONTROL BOARD

9 VAC 25-110-10 et seq. - GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT FOR DOMESTIC SEWAGE DISCHARGES OF LESS THAN OR EQUAL TO 1,000 GALLONS PER DAY

[Adopted: March 26, 2001 - Effective: August 1, 2001]

9 VAC 25-110-10. Definitions.

The words and terms used in this regulation shall have the same meanings as given in the State Water Control Law, Chapter 3.1 (§62.1-44.2 et seq.) of Title 62.1 of the Code of Virginia and 9 VAC 25-31-10 et seq. (VPDES Permit Regulation), unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Domestic Sewage" means the water-carried human wastes from residences, buildings, industrial establishments or other places.

9 VAC 25-110-20. Purpose; delegation of authority; effective date of permit.-

A. This general permit regulation governs domestic sewage discharges to surface waters from treatment works with a design discharge flow of less than or equal to 1,000 gallons per day on a monthly average.

B. The Director of the Department of Environmental Quality, or his designee, may perform any act of the Board provided under this chapter, except as limited by §62.1-44.14 of the Code of Virginia.

C. This general VPDES permit will become effective on August 1, 2001 and it expires on August 1, 2006. With respect to a particular facility, this general permit shall become effective upon the facility owner's compliance with the provisions of 9 VAC 25-110-60 and receipt of a copy of the general VPDES permit.

9 VAC 25-110-60. Authorization to discharge.

A. Any owner of a treatment works governed by this general permit is hereby authorized to discharge treated domestic sewage to surface waters of the Commonwealth of Virginia provided that the owner has filed with the Department the registration statement described in 9 VAC 25-110-70, has complied with the effluent limitations and other requirements of 9 VAC 25-110-80, and has complied with all the following conditions:

1. The owner shall not have been required to obtain an individual VPDES permit as may be required in 9 VAC 25-31-170 B;
2. The owner shall not be authorized by this general permit to discharge to surface waters specifically named in other board regulations or policies that prohibit such discharges;
3. The owner shall not be authorized by this general permit to discharge to surface waters where there are central sewage facilities reasonably available, as determined by the Department; and
4. The owner of any proposed treatment works or any treatment works that has not previously been issued a valid VPDES permit shall have applied to the Virginia Department of Health for an onsite sewage disposal system permit and the Virginia Department of Health must have determined that there is no technology available to serve that parcel of land with an onsite system.

B. Receipt of this general VPDES permit does not relieve any owner of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation, including applicable regulations of the Virginia Department of Health adopted pursuant to §§ 32.1-163 and 32.1-164 of the Code of Virginia.

9 VAC 25-110-70. Registration Statement.

A. Deadlines for submitting registration statement. The owner shall file a complete General VPDES Permit Registration Statement for domestic sewage discharges of less than or equal to 1,000 gallons per day. Any owner proposing a new discharge shall file a complete registration statement with the Department

at least 60 days prior to the date planned for commencing construction or operation of the treatment works from which the discharge will emanate. Any owner of an existing treatment works covered by an individual VPDES permit who proposes to be covered by this general permit shall file a complete registration statement at least 180 days prior to the expiration date of the individual VPDES permit. To avoid a lapse in permit coverage, any owner of an existing treatment works that was authorized to discharge under the general permit issued in 1996 shall have filed a complete registration statement prior to August 1, 2001.

B. Registration statement. The owner shall submit a registration statement that contains the following information:

1. Name and location of the facility/residence.
2. Name, mailing address, and work and home telephone numbers of the facility owner. Indicate if the owner is or will be the occupant of the facility.
3. Name of the water body receiving the discharge. Indicate if the discharge point is on a stream that usually flows during dry weather.
4. The amount of discharge, in gallons per day, on a monthly average.
5. A description of any pollutants, other than domestic sewage, to be discharged.
6. If there are central sewage facilities available to serve this facility.
7. If the facility currently has a VPDES permit. Provide the permit number, if applicable. Indicate if the facility has been built and begun discharge.
8. For the owner of any proposed treatment works or any treatment works that has not previously been issued a valid VPDES permit:
 - a. A topographic map that indicates the discharge point, the location of the property to be served by the treatment works, and the location of any wells, springs, and other water bodies, or downstream residences within $\frac{1}{2}$ mile downstream from the discharge;
 - b. A site diagram of the existing or proposed sewage treatment works, including the property boundaries, the location of the facility/residence to be served, the individual sewage treatment units, the receiving water body, and the discharge line location; and
 - c. A notification from the Virginia Department of Health that an onsite sewage disposal system permit has been applied for and that the Virginia Department of Health has determined that there is no technology available to serve that parcel of land with an onsite system.
9. For the owner of any existing treatment works, a copy of a valid maintenance contract that provides for the following:
 - a. Performance of all testing required in accordance with 9 VAC 25-110-80, Part I A and periodic inspections of the treatment works;
 - b. A written notification to the owner within 24 hours whenever the contract provider becomes aware that maintenance or repair of the owner's treatment works is necessary. The owner is responsible for prompt maintenance and repair of the treatment works including all costs associated with the maintenance or repair. Immediately upon receipt of notice that repair or maintenance is required, the owner shall begin emergency pump and haul of all sewage generated in the dwelling if full and complete repairs cannot be accomplished within 48 hours;
 - c. A log of the following items will be maintained by the contract provider:
 - (1) Results of all tests and sampling;
 - (2) Alarm activation incidents;
 - (3) Maintenance, corrective, or repair activities performed;
 - (4) Recommended repair or replacement items; and
 - (5) Copies of all reports prepared by the contract provider.
 - d. An inspection will be conducted by the contract provider within 48 hours after notification by the owner that a problem may be occurring; and
 - e. A minimum of 24 months of consecutive coverage under the maintenance contract.
10. The owner of any existing treatment works may request an exception to the maintenance contract requirement by submitting an Operation and Maintenance Plan to the Department for review and approval. At a minimum, the Plan shall contain the following information:
 - a. An up-to-date Operation and Maintenance Manual for the treatment works;
 - b. A log of maintenance performed on the plant including, but not limited to, the following:

- (1) The date and amount of disinfection chemicals added to the chlorinator.
- (2) If dechlorination is used, the date and amount of any dechlorination chemicals that are added.
- (3) The date and time of equipment failure(s) and the date and time the equipment was restored to service.
- (4) The date and approximate volume of sludge removed;
- c. Dated receipts for chemicals purchased, equipment purchased, and maintenance performed;
- d. Proof of installation of a non-resettable elapsed time meter for electric motor-driven equipment; and
- e. An effluent monitoring plan in accordance with the requirements of 9 VAC 25-110-80 Part I A.

11. The following certification: "I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations." The registration statement shall be signed in accordance with the requirements of 9 VAC 25-31-110.

9 VAC 25-110-80. General permit.

Any owner whose registration statement is accepted by the Board will receive the following permit and shall comply with the requirements contained therein and be subject to all requirements of 9 VAC 25-31-170.

General Permit No.: VAG40
Effective Date: August 1, 2001
Expiration Date: August 1, 2006

GENERAL PERMIT FOR DOMESTIC SEWAGE DISCHARGES
LESS THAN OR EQUAL TO 1,000 GALLONS PER DAY

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND
THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act (33 USC § 1251 et seq.), as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of treatment works with domestic sewage discharges of a design flow of less than or equal to 1,000 gallons per day on a monthly average, are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those waters specifically named in board regulations or policies that prohibit such discharges.

The authorized discharge shall be in accordance with this cover page, Part I - Effluent Limitations, Monitoring Requirements and Special Conditions, and Part II - Conditions Applicable to All VPDES Permits, as set forth herein.

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 001 to receiving waters where the 7Q10 flows are less than 0.2 MGD.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>Instantaneous Minimum</u>	<u>Instantaneous Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) *	NA	NL	1/year	Estimate
BOD ₅	NA	30 mg/l	1/year	Grab
Total Suspended Solids	NA	30 mg/l	1/year	Grab
Total Residual Chlorine** After contact tank	1.0 mg/l	NA	1/year	Grab
Final effluent	NA	Non-detectable	1/year	Grab
Fecal Coliform Bacteria***	NA	200/100 ml	1/year	Grab
pH (standard units)	6.0	9.0	1/year	Grab
Dissolved Oxygen	5 mg/l	NA	1/year	Grab

NL = No Limitation, monitoring required

NA = Not Applicable

2. All monitoring data required by Part I.A.1 shall be maintained on site in accordance with Part II.B. Reporting of results to the Department is not required; however, the monitoring results shall be made available to Department or Virginia Department of Health personnel upon request.

* The design flow of this treatment facility is less than or equal to 1,000 gallons per day.

** Applies only when chlorine is used for disinfection. Chlorine limitation of non-detectable is defined as <0.1 mg/l.

*** Applies only when methods other than chlorine are used for disinfection. Continuous disinfection capability shall be provided in order to maintain this effluent limit.

3. 40 CFR 133.102 (c) requires that the 30-day average percent removal for BOD₅ and total suspended solids shall not be less than 85%.

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 001 to receiving waters where the 7Q10 flows are equal to or greater than 0.2 MGD.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>Instantaneous Minimum</u>	<u>Instantaneous Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) *	NA	NL	1/year	Estimate
BOD ₅	NA	30 mg/l	1/year	Grab
Total Suspended Solids	NA	30 mg/l	1/year	Grab
Total Residual Chlorine** Final effluent	1.0 mg/l	2.0 mg/l	1/year	Grab
Fecal Coliform Bacteria***	NA	200/100 ml	1/year	Grab
pH (standard units)	6.0	9.0	1/year	Grab

NL = No Limitation, monitoring required

NA = Not Applicable

2. All monitoring data required by Part I.A.1 shall be maintained on site in accordance with Part II.B. Reporting of results to the Department is not required; however, the monitoring results shall be made available to Department or Virginia Department of Health personnel upon request.

* The design flow of this treatment facility is less than or equal to 1,000 gallons per day.

** Applies only when chlorine is used for disinfection.

*** Applies only when methods other than chlorine are used for disinfection. Continuous disinfection capability shall be provided in order to maintain this effluent limit.

3. 40 CFR 133.102 (c) requires that the 30-day average percent removal for BOD₅ and total suspended solids shall not be less than 85%.

B. Special Conditions

1. There shall be no discharge of floating solids or visible foam in other than trace amounts.

2. Schedule of Compliance. This compliance schedule shall be allowed only for treatment works that were existing on the effective date of this general permit. Treatment works constructed after the permit effective date are expected to comply with the limitations and conditions of the general permit from the date of operation. The permittee shall install equipment or unit processes or make other physical modifications to the treatment works that are necessary to achieve compliance with the limitations and conditions of this permit within 180 days of the date of coverage under the permit. The modifications shall not be initiated until written authorization is first provided by the Virginia Department of Health or the Department of Environmental Quality. The permittee shall submit to the Department of Environmental Quality Regional Office a written notice certifying completion of any necessary modifications on or before the 180 day compliance deadline. If the permittee is unable to meet the deadline, a written notice shall be submitted that shall include the cause of the delay, any actions taken to eliminate the delay, and the projected date for compliance.

3. Maintenance Contract. For existing treatment works, the permittee shall maintain a maintenance contract during the permit term. A copy of a valid maintenance contract shall be maintained at the site of treatment works and made available to the Department or to the Virginia Department of Health for examination upon request. For proposed treatment works, the permittee shall submit a copy of a valid maintenance contract to the Department prior to operation of the treatment works. The maintenance contract shall provide for the following:

- a. Performance of all testing required in accordance with Part I.A and periodic inspections of the treatment works;
- b. A written notification to the owner within 24 hours whenever the contract provider becomes aware that maintenance or repair of the owner's treatment works is necessary. The owner is responsible for prompt maintenance and repair of the treatment works including all costs associated with the maintenance or repair. Immediately upon receipt of notice that repair or maintenance is required, the owner shall begin emergency pump and haul of all sewage generated in the dwelling if full and complete repairs cannot be accomplished within 48 hours.
- c. A log of the following items will be maintained by the contract provider:
 - (1) Results of all tests and sampling;
 - (2) Alarm activation incidents;
 - (3) Maintenance, corrective, or repair activities performed;
 - (4) Recommended repair or replacement items; and
 - (5) Copies of all reports prepared by the contract provider.
- d. An inspection will be conducted by the contract provider within 48 hours after notification by the owner that a problem may be occurring; and
- e. A minimum of 24 months of consecutive coverage under the maintenance contract.

4. Operation and Maintenance Plan. The owner of any treatment works may request an exception to the maintenance contract requirement by submitting an Operation and Maintenance Plan to the Department for review and approval. At a minimum, the Plan shall contain the following information:

- a. An up-to-date Operation and Maintenance Manual for the treatment works;
- b. A log of maintenance performed on the plant including, but not limited to, the following:
 - (1) The date and amount of disinfection chemicals added to the chlorinator.
 - (2) If dechlorination is used, the date and amount of any dechlorination chemicals that are added.
 - (3) The date and time of equipment failure(s) and the date and

time the equipment was restored to service.

- (4) The date and approximate volume of sludge removed;
 - c. Dated receipts for chemicals purchased, equipment purchased, and maintenance performed;
 - d. Proof of installation of a non-resettable elapsed time meter for electric motor-driven equipment; and
 - e. An effluent monitoring plan in accordance with Part I A.
- Should the permittee fail to implement the approved Operation and Maintenance Plan, or if there are violations of effluent limitations, the Department reserves the right to require the permittee to obtain a maintenance contract.

PART II
CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring.

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records.

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least 3 years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results.

- 1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the Department's regional office.
- 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR or reporting form specified by the Department.
- 4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information.

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists

for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges.

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
 2. Breakdown of processing or accessory equipment;
 3. Failure or taking out of service some or all of the treatment works;
- and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Part II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office. Reports may be made by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or

- (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;

- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.

1. Registration Statement. All registration statements shall be signed as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other

comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1 or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part II K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a new registration statement at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the

Board. The Board shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit.

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law.

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges.

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate.

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and 3.

2. Notice

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II U 2.

b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the cause(s) of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Part II I; and

d. The permittee complied with any remedial measures required under Part II S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry.

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:

a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;

b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability.

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

General Permit No.:VAG40
Effective Date: August 1, 2001
Expiration Date: August 1, 2006

GENERAL PERMIT FOR DOMESTIC SEWAGE DISCHARGES
LESS THAN OR EQUAL TO 1,000 GALLONS PER DAY

AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND
THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act (33 USC § 1251 et seq.), as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of treatment works with domestic sewage discharges of a design flow of less than or equal to 1,000 gallons per day on a monthly average, are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those waters specifically named in board regulations or policies which prohibit such discharges.

The authorized discharge shall be in accordance with this cover page, Part I - Effluent Limitations, Monitoring Requirements and Special Conditions, and Part II - Conditions Applicable to All VPDES Permits, as set forth herein.

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 001 to receiving waters where the 7Q10 flows are less than 0.2 MGD.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>Instantaneous Minimum</u>	<u>Instantaneous Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) *	NA	NL	1/year	Estimate
BOD ₅	NA	30 mg/l	1/year	Grab
Total Suspended Solids	NA	30 mg/l	1/year	Grab
Total Residual Chlorine** After contact tank	1.0 mg/l	NA	1/year	Grab
Final effluent	NA	Non-detectable	1/year	Grab
Fecal Coliform Bacteria***	NA	200/100 ml	1/year	Grab
pH (standard units)	6.0	9.0	1/year	Grab
Dissolved Oxygen	5 mg/l	NA	1/year	Grab

NL = No Limitation, monitoring required

NA = Not Applicable

2. All monitoring data required by Part I.A.1 shall be maintained on site in accordance with Part II.B. Reporting of results to the Department is not required; however, the monitoring results shall be made available to Department or Virginia Department of Health personnel upon request.

* The design flow of this treatment facility is less than or equal to 1,000 gallons per day.

** Applies only when chlorine is used for disinfection. Chlorine limitation of non-detectable is defined as <0.1 mg/l.

*** Applies only when methods other than chlorine are used for disinfection. Continuous disinfection capability shall be provided in order to maintain this effluent limit.

3. 40 CFR 133.102 (c) requires that the 30-day average percent removal for BOD₅ and total suspended solids shall not be less than 85%.

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 001 to receiving waters where the 7Q10 flows are equal to or greater than 0.2 MGD.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>Instantaneous Minimum</u>	<u>Instantaneous Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) *	NA	NL	1/year	Estimate
BOD ₅	NA	30 mg/l	1/year	Grab
Total Suspended Solids	NA	30 mg/l	1/year	Grab
Total Residual Chlorine** Final effluent	1.0 mg/l	2.0 mg/l	1/year	Grab
Fecal Coliform Bacteria***	NA	200/100 ml	1/year	Grab
pH (standard units)	6.0	9.0	1/year	Grab

NL = No Limitation, monitoring required

NA = Not Applicable

3. All monitoring data required by Part I.A.1 shall be maintained on site in accordance with Part II.B. Reporting of results to the Department is not required; however, the monitoring results shall be made available to Department or Virginia Department of Health personnel upon request.

* The design flow of this treatment facility is less than or equal to 1,000 gallons per day.

** Applies only when chlorine is used for disinfection.

*** Applies only when methods other than chlorine are used for disinfection. Continuous disinfection capability shall be provided in order to maintain this effluent limit.

3. 40 CFR 133.102 (c) requires that the 30-day average percent removal for BOD₅ and total suspended solids shall not be less than 85%.

B. Special Conditions

1. There shall be no discharge of floating solids or visible foam in other than trace amounts.
2. **Schedule of Compliance**
This compliance schedule shall be allowed only for treatment works that were existing on the effective date of this general permit. Treatment works constructed after the permit effective date are expected to comply with the limitations and conditions of the general permit from the date of operation. The permittee shall install equipment or unit processes or make other physical modifications to the treatment works that are necessary to achieve compliance with the limitations and conditions of this permit within 180 days of the date of coverage under the permit. The modifications shall not be initiated until written authorization is first provided by the Virginia Department of Health or the Department of Environmental Quality. The permittee shall submit to the Department of Environmental Quality Regional Office a written notice certifying completion of any necessary modifications on or before the 180 day compliance deadline. If the permittee is unable to meet the deadline, a written notice shall be submitted which shall include the cause of the delay, any actions taken to eliminate the delay, and the projected date for compliance.
3. **Maintenance Contract**
For existing treatment works, the permittee shall maintain a maintenance contract during the permit term. A copy of a valid maintenance contract shall be maintained at the site of treatment works and made available to the Department or to the Virginia Department of Health for examination upon request. For proposed treatment works, the permittee shall submit a copy of a valid maintenance contract to the Department prior to operation of the treatment works. The maintenance contract shall provide for the following:
 - a. Performance of all testing required in accordance with Part I.A and periodic inspections of the treatment works;
 - b. A written notification to the owner within 24 hours whenever the contract provider becomes aware that maintenance or repair of the owner's treatment works is necessary. The owner is responsible for prompt maintenance and repair of the treatment works including all costs associated with the maintenance or repair. Immediately upon receipt of notice that repair or maintenance is required, the owner shall begin emergency pump and haul of all sewage generated in the dwelling if full and complete repairs cannot be accomplished within 48 hours.
 - c. A log of the following items will be maintained by the contract provider:
 - (1) Results of all tests and sampling;
 - (2) Alarm activation incidents;
 - (3) Maintenance, corrective, or repair activities performed;
 - (4) Recommended repair or replacement items; and
 - (5) Copies of all reports prepared by the contract provider.
 - d. An inspection will be conducted by the contract provider within 48 hours after notification by the owner that a problem may be occurring; and
 - e. A minimum of 24 months of consecutive coverage under the maintenance contract.
4. **Operation and Maintenance Plan**
The owner of any treatment works may request an exception to the maintenance contract requirement by submitting an Operation and

Maintenance Plan to the Department for review and approval. At a minimum, the Plan shall contain the following information:

- a. An up-to-date Operation and Maintenance Manual for the treatment works;
- b. A log of maintenance performed on the plant, including, but not limited to, the following:
 - (1) The date and amount of disinfection chemicals added to the chlorinator.
 - (2) If dechlorination is used, the date and amount of any dechlorination chemicals that are added.
 - (3) The date and time of equipment failure(s) and the date and time the equipment was restored to service.
 - (4) The date and approximate volume of sludge removed;
- c. Dated receipts for chemicals purchased, equipment purchased, and maintenance performed;
- e. Proof of installation of a non-resettable elapsed time meter for electric motor-driven equipment; and
- f. An effluent monitoring plan in accordance with Part I A.

Should the permittee fail to implement the approved Operation and Maintenance Plan, or if there are violations of effluent limitations, the Department reserves the right to require the permittee to obtain a maintenance contract.

PART II
CONDITIONS APPLICABLE TO ALL VPDES PERMITS

- A. Monitoring.
1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
 2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
- B. Records.
1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least 3 years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.
- C. Reporting Monitoring Results.
1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the Department's regional office.
 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR or reporting form specified by the Department.
 4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- D. Duty to Provide Information.
- The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other

information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

- E. Compliance Schedule Reports.
Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Unauthorized Discharges.
Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:
1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.
- G. Reports of Unauthorized Discharges.
Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:
1. A description of the nature and location of the discharge;
 2. The cause of the discharge;
 3. The date on which the discharge occurred;
 4. The length of time that the discharge continued;
 5. The volume of the discharge;
 6. If the discharge is continuing, how long it is expected to continue;
 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.
- Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.
- H. Reports of Unusual or Extraordinary Discharges.
If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:
1. Unusual spillage of materials resulting directly or indirectly from processing operations;
 2. Breakdown of processing or accessory equipment;
 3. Failure or taking out of service some or all of the treatment works; and
 4. Flooding or other acts of nature.
- I. Reports of Noncompliance
The permittee shall report any noncompliance which may adversely affect

state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.
3. The permittee shall report all instances of noncompliance not reported under Part II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office. Reports may be made by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.

1. Registration Statement. All registration statements shall be signed

as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1 or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Part II K 1 or 2 shall make the following certification:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.

The permittee shall comply with all conditions of this permit. Any permit

noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

- M. **Duty to Reapply.**
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a new registration statement at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.
- N. **Effect of a Permit.**
This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.
- O. **State Law.**
Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.
- P. **Oil and Hazardous Substance Liability.**
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.
- Q. **Proper Operation and Maintenance.**
The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- R. **Disposal of solids or sludges.**
Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.
- S. **Duty to Mitigate.**
The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the

environment.

- T. Need to Halt or Reduce Activity not a Defense.
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- U. Bypass.
1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and 3.
 2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.
 3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II U 2.
 - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.
- V. Upset.
1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II I; and
 - d. The permittee complied with any remedial measures required under Part II S.
 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- W. Inspection and Entry.
- The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
1. Enter upon the permittee's premises where a regulated facility or

- activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability.

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**REISSUANCE OF A GENERAL VPDES PERMIT
TO DISCHARGE TO STATE WATERS AND STATE
CERTIFICATION UNDER THE STATE WATER CONTROL LAW**

The State Water Control Board ("Board") has under consideration the reissuance of a general VPDES permit for domestic sewage discharges with a design flow of less than or equal to 1,000 gallons per day on a monthly average. This general permit will replace VAG40 which expires August 1, 2001. Owners covered under the expiring general permit, who wish to continue to discharge under a general permit, must register for coverage under the new general permit.

Permit Number: VAG40

Name of Permittee: Any owner of a domestic sewage discharge with a design flow of less than or equal to 1,000 gallons per day on a monthly average in the Commonwealth of Virginia agreeing to be regulated under the terms of this general permit.

Facility Location: Commonwealth of Virginia

Receiving Waters: All surface waters within the boundaries of the Commonwealth of Virginia, except those waters specifically named in other Board regulations or policies which prohibit such discharges.

On the basis of preliminary review and application of lawful standards and regulations, the State Water Control Board proposes to reissue the general permit subject to certain conditions and has prepared a draft permit. The Board has determined that this category of discharges is appropriately controlled under a general permit. The category of discharges to be included involves facilities with the same or similar types of operations and which discharge the same or similar types of wastes. The draft general permit requires that all covered facilities meet the same effluent limitations, conditions and monitoring requirements.

Persons may comment in writing on the proposed permit action within 60 days from October 23, 2000. Comments should be addressed to the contact person listed below. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered by the Board.

All pertinent information is on file and may be inspected, and copied by contacting Lily Choi at:

Virginia Department of Environmental Quality
P.O. Box 10009
Richmond, Virginia 23240
(804) 698-4054

A public hearing will be held on this draft permit. Notice of the public hearing will be published in local newspapers and in the Virginia Register. Following the public hearing comment period, the Board will make its determinations regarding the proposed permit action.

FACT SHEET

General VPDES Permit for Domestic Sewage Discharges $\leq 1,000$ gpd

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Proposed Effluent Limitations and Monitoring Requirements (all apply to final effluent unless indicated otherwise)

Subcategory I - Discharges to receiving waters where the 7Q10 flows are less than 0.2 million gallons per day (MGD)

<u>Parameter</u>	<u>Limitation</u>
BOD ₅	30 mg/l max.
Total Suspended Solids	30 mg/l max.
pH	6.0 min.- 9.0 max.
Total Residual Chlorine*	
After contact tank	1.0 mg/l min.
Final effluent	Non-detectable max.
Dissolved Oxygen	5.0 mg/l min.
Fecal Coliform**	200/100ml. max.

Subcategory II - Discharges to receiving waters where the 7Q10 flows are equal to or greater than 0.2 MGD.

<u>Parameter</u>	<u>Limitation</u>
BOD ₅	30 mg/l max.
Total Suspended Solids	30 mg/l max.
pH	6.0 min.- 9.0 max.
Total Residual Chlorine*	1.0 mg/l min.
	2.0 mg/l max.
Fecal Coliform**	200/100ml. max.

* Applies only when chlorine is used for disinfection. Chlorine limitation of non-detectable is defined as <0.1 mg/l.

** Applies only when methods other than chlorine are used for disinfection.

Monitoring is required annually by grab sample. Reporting is not required; however, the monitoring results shall be made available to Department of Environmental Quality or Virginia Department of Health personnel upon request.

Basis for Proposed Effluent Limitations and Monitoring Requirements

Flow shall be estimated each time effluent samples are taken. The design flow of the treatment works must be less than or equal to 1,000 gallons per day on a monthly average.

The general permit recognizes two subcategories within this discharge category. Subcategory I includes discharges to receiving waters where the 7Q10 flows are less than 0.2 MGD. The 7Q10 flow is the mean stream flow over 7 consecutive days which, on a statistical basis, can be expected to occur once every 10 years. These receiving waters provide low to moderate dilution of effluent discharges. Subcategory II includes discharges to waters where the 7Q10 flows are equal to or greater than 0.2 MGD. Discharges in this subcategory receive ample dilution.

The effluent limitations for BOD, TSS, and pH in both subcategories are based on federal requirements for secondary treatment (40 CFR Part 133). BOD and TSS concentrations of 30 mg/l are listed as 30-day averages in the federal regulation, but because of the annual sampling frequency here proposed, they are applied as instantaneous maximums in the general permit. These effluent concentrations are consistently achievable through proper operation and maintenance of treatment works typically installed to treat very small domestic sewage flows. The treatment works installed by the owners whose discharges are covered under this general permit are also expected to attain no less than 85 percent removal of the 30-day average influent BOD₅ and total suspended solids as anticipated by the federal requirements for secondary treatment (40 CFR Part 133).

The discharge from these treatment works is usually intermittent and varies according to the water use pattern in the home or business being served. The

FACT SHEET

General VPDES Permit for Domestic Sewage Discharges $\leq 1,000$ gpd

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flow of 1,000 gallons per day is less than 1 gallon per minute on a continuous basis. When it stops and starts it roughly equates to a 5-gallon bucket of water every 7 minutes or a large trash can (45 gallons) every hour. Most treatment works of this type actually discharge in the range of 500 to 600 gallons per day. When they discharge, the effluent may infiltrate into the soil immediately below the discharge point or it may persist in the receiving water course for a very short distance, typically less than 100 yards, except during wet weather. The validity of modelling the water quality impacts of discharges under these conditions is very suspect. The basic assumptions under which the economically feasible water quality models were formulated cannot be applied to these discharges. Steady state models are not applicable to a situation where the stream and/or the discharge are intermittent. When the receiving stream is of sufficient size to make water quality modeling a reasonable undertaking, a 1,000 gallon per day discharge is diluted by the stream to the point that meaningful results for parameters like BOD are difficult to measure. The Department has no records of fish kills, water quality standards violations, pollution events or other significant environmental harm caused by small ($\leq 1,000$ gpd) individual dischargers. Therefore, the general permit is drafted with secondary treatment limits for BOD and TSS which are believed to provide adequate water quality protection. In the low to moderate dilution situations of Subcategory I, a minimum dissolved oxygen limitation of 5.0 mg/l is also included to reduce the potential for oxygen depletion in the receiving waters.

The general permit also imposes limitations to assure adequate disinfection of the wastewater prior to discharge. These limitations vary according to subcategory. For discharges in Subcategory I, there will be limited to moderate dilution of the wastewater from the treatment works and the limitations that deal with disinfection for human health protection are more stringent as a result. For all discharges in this subcategory the total residual chlorine limitation for final effluents is non-detectable. This will assure compliance with the chlorine water quality standard. In order to assure adequate disinfection, the permit requires a minimum 1.0 mg/l chlorine residual at the end of the chlorine contact tank. This chlorine residual level is expected to reduce fecal coliform bacteria to at least an order of magnitude below the standard. If disinfection is achieved by means other than chlorination, the permit imposes a fecal coliform limitation to assure compliance with the water quality standard.

For discharges in Subcategory II, the limits are less stringent. The discharge of up to 1,000 gallons per day into a 7Q10 flow of 0.2 MGD (200,000 gallons per day) receiving stream represents at least a 200:1 dilution ratio. It is unlikely that residual chlorine from a small domestic sewage treatment works would be detectable after stream flow and wastewater discharge mix. Even if a residual were detected, if the wastewater discharge contained the maximum chlorine limit of 2.0 mg/l, it would be diluted to 0.01 mg/l of chlorine, which would comply with the water quality standard of a "non-detectable" chlorine discharge. In these cases, the general permit would not require dechlorination of the effluent. The dissolved oxygen limitation is unnecessary in this subcategory because any oxygen demand exerted by such a small wastewater discharge on a stream of 0.2 MGD or greater is unmeasurable.

Proposed Special Conditions and Their Basis

1. Restriction of floating solids and visible foam discharges

This condition is required to comply with the general water quality standard (9 VAC 25-260-20).

2. Schedule of Compliance

Existing treatment works that must add unit processes or be otherwise physically modified in order to comply with the discharge limitations of the general permit are allowed a compliance period of 180 days from the date of permit coverage to complete the necessary modifications. A certification of completion of the modifications must be filed with the Department in order to verify compliance. New treatment works are expected to meet the permit requirements on the first day

of coverage.

3. Maintenance Contract

In order to ensure that the treatment works is properly operated and maintained, the general permit requires the permittee to obtain a maintenance contract. For proposed treatment works, prior to start-up, the permittee must submit a copy of a valid maintenance contract, with a minimum of two years coverage, to the Department. For existing treatment works, the permittee shall maintain a maintenance contract throughout the permit term.

4. Operation and Maintenance Plan

In lieu of obtaining a maintenance contract, the permittee may opt to submit an Operation and Maintenance Plan to the Department for review and approval. Should the permittee fail to implement the approved Plan, or if violations of effluent limitations occur, the Department reserves the right to require the permittee to obtain a maintenance contract.

The general permit does not anticipate that the covered treatment works will be treating sewage from other users or indirect dischargers. Therefore, the permit contains no conditions applicable to such users.

General Permit Coverage

The general permit will have a fixed term of five (5) years effective upon Board approval. Every authorization to discharge under this general permit will expire at the same time and all authorizations to discharge will be renewed on the same date, provided a complete registration statement has been filed prior to the general permit's expiration date.

All persons desiring to be covered by this general permit must register with the Department by filing a complete registration statement. The registration statement shall be submitted and a notification of coverage issued prior to any discharges occurring at the facility to be covered under the permit.

The Board will review existing individual permits for facilities with design flows of $\leq 1,000$ gpd prior to the time the permits are scheduled to be reissued to determine the facility's eligibility for coverage under this general permit. Owners of all existing permitted discharge facilities that the Board believes are eligible for coverage under this permit will be notified by the Board of their eligibility for coverage prior to the time the individual permit is scheduled to be reissued. This notice will include a request that the owner submit a general permit registration statement. Any owner may request that an individual permit be issued by submitting an appropriate application or they may request coverage under the general permit by filing a registration statement. Upon receipt of a completed registration statement, the Board will determine if coverage under a general permit is appropriate. Consideration of regulatory requirements regarding antidegradation will occur prior to granting coverage under this general permit.

The general permit does not apply to any discharge that will result in significant impacts to state waters. The determination of no significant impact is made in accordance with the State Water Control Board's Antidegradation Policy contained in the Virginia Water Quality Standards, 9 VAC 25-260-5 et seq.

All facilities that the Department believes are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted to the Department, the Board determines that coverage under the general permit is appropriate, and the Department sends a copy of the general permit to the applicant. If coverage under the general permit is inappropriate, the applicant will be so notified and will be requested to submit an application for an individual permit.

Please Type or Print All Information

- VIRGINIA DEQ REGISTRATION STATEMENT
GENERAL VPDES PERMIT FOR DOMESTIC SEWAGE DISCHARGES OF
LESS THAN OR EQUAL TO 1,000 GALLONS PER DAY**

becomes aware that maintenance or repair of the owner's treatment works is necessary. The owner is responsible for prompt maintenance and repair of the treatment works including all costs associated with the maintenance and repair. Immediately upon receipt of notice that repair or maintenance is required, the owner shall begin emergency pump and haul of all sewage generated in the dwelling if full and complete repairs cannot be accomplished within 48 hours;

C. A log of the following items will be maintained by the contract provider:

1. Results of all tests and sampling;
2. Alarm activation incidents;
3. Maintenance, corrective, or repair activities performed;
4. Recommended repair or replacement items; and
5. Copies of all reports prepared by the contract provider.

d. An inspection will be conducted by the contract provider within 48 hours after notification by the owner that a problem may be occurring; and

d. A minimum of twenty-four months of consecutive coverage under the maintenance contract.

10. The owner of any existing treatment works may request an exception to the maintenance contract requirement by submitting an Operation and Maintenance Plan to the Department for review and approval. At a minimum, the Plan shall contain the following information:

a. An up-to-date Operation and Maintenance Manual for the treatment works;

b. A log of maintenance performed on the plant, including, but not limited to, the following:

- (1) The date and amount of disinfection chemicals added to the chlorinator.
- (2) If dechlorination is used, the date and amount of any dechlorination chemicals that are added.
- (3) The date and time of equipment failure(s) and the date and time the equipment was restored to service.
- (4) The date and approximate volume of sludge removed;

c. Dated receipts for chemicals purchased, equipment purchased, and maintenance performed;

d. Proof of installation of a non-resettable elapsed time meter for electric motor-driven equipment; and

e. An effluent monitoring plan in accordance with the requirements of 9 VAC 25-110-80 Part I A.

11. **Certification:** "I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signature(s):

Date:

Date:

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____ Date: _____

Basin _____ Subbasin _____ Stream Class _____ Section _____

Special Standards _____

**REGISTRATION STATEMENT INSTRUCTIONS
GENERAL VPDES PERMIT FOR DOMESTIC SEWAGE DISCHARGES OF
LESS THAN OR EQUAL TO 1,000 GALLONS PER DAY**

General

A Registration Statement must be submitted by the owner of a domestic sewage discharge with a design flow of less than or equal to 1,000 gallons per day on a monthly average, requesting coverage under this general permit. Contact the nearest DEQ regional office if you have questions about filing this form.

Section 1 Facility Information

Provide the name and address of the facility/residence.

Section 2 Owner Information

Provide the name(s), mailing address and telephone number(s) of the owner(s) of the facility. Indicate if the owner is the occupant of the facility.

Section 3 Receiving Water Information

Provide the name of the water body that receives the discharge. Indicate if the receiving water flows during dry weather.

Section 4 Discharge Quantity

Provide amount of discharge in gallons per day on a monthly average.

Section 5 Other Pollutants

Indicate if any pollutants other than domestic sewage are discharged from this facility. Provide further explanation if applicable.

Section 6 Central Sewage Facilities

Indicate if central sewage facilities are available to this facility.

Section 7 VPDES Permit Information

Indicate if this facility is currently covered under any VPDES permit. Provide the permit number if applicable. Also indicate if this facility has been built and begun discharge.

Section 8 Proposed Facility or Any Facility That Has Never Been Covered Under A VPDES Permit

Item a. Map should be legible and of sufficient scale to show the required features clearly marked.

Item b. A site diagram should be legible to show the proposed or existing treatment works. Identify individual treatment units and other required features.

Item c. For treatment works serving single family dwellings, contact the respective local health department and obtain the required notification.

Item d. For discharges into any water impoundment (e.g. lakes), contact the local government and obtain the required notification. Should the local government fail to provide the required notification within 45 days upon request, provide a copy of the request that was sent to the local government.

Section 9 Maintenance Contract Requirements

For any existing treatment works, the owner must submit a copy of a valid maintenance contract that meets the specified requirements with a complete registration statement. For proposed treatment works, the owner must submit a copy of a valid maintenance contract prior to operation.

Section 10 Operation and Maintenance Plan

In lieu of obtaining a maintenance contract per Section 9 above, the owner of any existing treatment works may submit an Operation and Maintenance Plan with the registration statement to the Department for review and approval. The Plan must meet all specified requirements. For proposed treatment works, the owner must submit the Plan to and receive an approval from the DEQ prior to operation.

Section 11 Certification

The certification must bear an original signature in ink; photocopies are not acceptable. State statutes provide for severe penalties for submitting false information on this Registration Statement. State regulations require this Registration Statement to be signed as follows:

For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

Local Government Ordinance Form

SUBJECT: Local and Areawide Planning Requirements

TO: Applicants For A Virginia Pollutant Discharge Elimination System Permit to Discharge
Treated Sewage into an Impoundment

§62.1-44.15:3 A of the State Water Control Law states:

"No application for a certificate to discharge sewage into any water impoundment located in the state shall be considered complete unless it contains notification from the governing body of the county, city, or town in which the discharge is to take place that the location and operation of the discharging facility are consistent with applicable ordinances adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2. The governing body shall inform in writing the applicant and the Board of the discharging facility's compliance or noncompliance not more than forty-five days from receipt by the chief administrative officer, or his agent, of a request from the applicant. Should the governing body fail to provide such written notification within forty-five days, the requirement for such notification is waived. The provisions of this subsection shall not apply to any discharge for which a valid certificate had been issued prior to the effective date of this act. [Effective March 10, 2000]"

In accordance with this section, applications for a VPDES permit for a sewage discharge into an impoundment will not be considered complete until the certification statement is submitted to the Department of Environmental Quality Regional Office. Applicants may use the bottom of this page to transmit the request to the locality.

To: _____
(County, City, or Town Administrator/Manager)

I am in the process of completing an application for a VPDES permit. In accordance with Chapter 22 (§15.2-2200 et seq.) of Title 15.2 of the Code, I request that you sign one of the three statements certifying that the operation described on the attached permit application is or is not consistent with your local ordinances. Please return this form to me at:

(Applicant's address) : _____

PLEASE SEE THE REVERSE SIDE OF THIS FORM FOR CERTIFICATION REQUIREMENTS

LOCAL GOVERNMENT ORDINANCE FORM

For VPDES permit applications for sewage discharges into impoundments

In reference to the request from: _____
Applicant's Name

For certification of a discharge at:

Name and Location of Facility

I hereby certify,

____ (1) That the proposed location, and operation of the facility is consistent with all ordinances adopted pursuant to Chapter 22 (§15.2-2200 et seq.) of Title 15.2 of the Code of Virginia

OR

____ (2) That no local ordinances are in effect pursuant to Chapter 22 (§15.2-2200 et seq.) of Title 15.2 of the Code of Virginia

OR

____ (3) That the proposed location and operation of the facility is **not** consistent with all ordinances adopted pursuant to Chapter 22 (§15.2-2200 et seq.) of Title 15.2 of the Code of Virginia

Signature Title

Printed Name Date

Transmittal Letter for General Permit Coverage

Regional DEQ Letterhead
Date

Owner's Name
Owner's Address

RE: General VPDES Permit No. VAG400000[*insert individual discharge identification number*]
Facility Name
Facility Address

Dear Permittee:

We have reviewed your Registration Statement and determined that this domestic sewage treatment facility is hereby covered under the referenced General VPDES Permit. A copy of the permit is enclosed. Please read it carefully, because you are responsible for assuring that the treatment facility is operated and maintained in accordance with the limitations and conditions of the General Permit. Also enclosed is a form which may be used to request an ownership transfer for the General VPDES permit. If you wish to have the permit ownership transferred, please complete the form and return it to this office accordingly.

Receipt of this General VPDES Permit does not relieve any owner of the responsibility to comply with any other statute or regulations, including applicable regulations of the Department of Health adopted pursuant to §§ 32.1-163 and 32.1-164 of the Code of Virginia.

[Insert the following paragraph only if the permittee requested an exception to the maintenance contract requirement by submitting an Operation and Maintenance Plan, and the plan was reviewed and approved] Based on the review of the Operation and Maintenance Plan (Plan) submitted with the registration statement, exception to the maintenance contract requirement is granted and the Operation and Maintenance Plan submitted with the registration statement is approved. Should you fail to implement the approved Plan, or if there are violations of effluent limitations, the Department reserves the right to require you to obtain a maintenance contract.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Water Permit Manager

Enclosures: Permit No. VAG400000
Transfer of Ownership Agreement Form

cc: Local Health Department or DWWE Area Engineer

Operation and Maintenance Plan Approval Letter

Regional DEQ Letterhead
Date

Owner's Name
Owner's Address

RE: General VPDES Permit No. VAG400000[*insert individual discharge identification number*]
Facility Name
Facility Address

Dear Permittee:

In accordance with the referenced permit special condition in Part I. B.4, we have received your request for an exception to the maintenance contract requirement and a copy of the Operation and Maintenance Plan for your domestic sewage treatment works. Based on our review, exception to the maintenance contract requirement is granted and the Operation and Maintenance Plan is approved through this letter. Should you fail to implement the approved Plan, or if there are violations of effluent limitations, the Department reserves the right to require you to obtain a maintenance contract.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Water Permit Manager

cc: Local Health Department or DWWE Area Engineer

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - PRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: March 30, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), tidal (evidence of tidal flats on the topo), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean. Use dilution ratios for tidal waters.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for PRO are the Potomac, Rappahannock, Chesapeake Bay, York, Middle James/Appomattox, Lower James, Nottoway/Meherrin, Blackwater, and Roanoke.
4. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
Potomac	0.0499
Rappahannock	0.0324
Chesapeake Bay	0.0433
York	0.0220
Middle James/ Appomattox	0.0064
Lower James	0.0771
Nottoway/ Meherrin	0.0049
Blackwater	0.0
Roanoke	0.0823

5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.
6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
Potomac	6.21
Rappahannock	9.57
Chesapeake Bay	7.16
York	14.09
Middle James/ Appomattox	48.44
Lower James	4.02
Nottoway/ Meherrin	62.96
Blackwater	-----
Roanoke	3.76

The runoff rates for each basin were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". The publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by PRO's borders was used in establishing the runoff rates for the basin. For example, there are 24 low flow sites listed in the publication where a 7Q10 value was provided for a stream in the Nottoway/Meherrin River Basin. Of the 24, 11 lie within the PRO's borders. The runoff rates were determined for each of the 11 sites in PRO and an average runoff rate was calculated for the Nottoway/Meherrin Basin. The same procedure was used to establish the runoff rates for the remaining basins in PRO with one exception. A very small portion of the Roanoke Basin is within PRO's borders and there were no sites in this portion. Therefore, the runoff rates and critical drainage area calculated for the sites in the Roanoke Basin within SCRO's borders were used for PRO.

The runoff rates listed above for the basins lying wholly or partially within PRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - SCRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: April 2, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for SCRO are the James, Appomattox, Nottoway/Meherrin, Roanoke, and Smith/Dan.
5. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
James	0.0562
Appomattox	0.0341
Nottoway/ Meherrin	0.0142
Roanoke	0.0823
Smith/Dan	0.0745

5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.
6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
James	5.52
Appomattox	9.09
Nottoway/ Meherrin	21.83
Roanoke	3.77
Smith/Dan	4.16

The runoff rates for each basin were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". The publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by SCRO's borders was used in establishing the runoff rates for the basin. For example, there are 24 low flow sites listed in the publication where a 7Q10 value was provided for a stream in the Nottoway/Meherrin River Basin. Of the 24, 7 lie within the SCRO's borders. The runoff rates were determined for each of the 7 sites in SCRO and an average runoff rate was calculated for the Nottoway/Meherrin Basin. The same procedure was used to establish the runoff rates for the remaining basins in SCRO.

The runoff rates listed above for the basins lying wholly or partially within SCRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - SWRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: March 30, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for SWRO are the Yadkin, New, Clinch, Powell, Holston, and Big Sandy.
6. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
Yadkin	0.1567
New	0.2094
Holston	0.1453
Clinch	0.0462
Powell	0.0660
Big Sandy	0.0133

5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.
6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
Yadkin	1.98
New	1.48
Holston	2.13
Clinch	6.71
Powell	4.70
Big Sandy	23.31

The runoff rates for each basin (except the Holston) were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". This publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation. The publication listed only two sites for the entire Holston basin. Therefore, site specific measurement data collected at VPDES permit sites in the basin were used in addition to the available data from the publication. The site specific measurements were correlated with continuous record gages in the basin and the 7Q10 for each site was determined from the regression line.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by SWRO's borders was used in establishing the runoff rates for the basin. For example, there are 15 low flow sites listed for the New River Basin in the publication. Of the 15, 10 lie within the SWRO's borders. The runoff rates were determined for each of the 10 sites in SWRO and an average runoff rate was calculated for the New Basin. The same procedure was used to establish the runoff rates for the remaining basins in SWRO with two exceptions. The first is the Holston Basin which was addressed above. The second is the Yadkin Basin which is based on only one site due to the size of its watershed in Virginia.

The runoff rates listed above for the basins lying wholly or partially within SWRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - TRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: April 2, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), tidal (evidence of tidal flats on topo), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean. Use dilution ratios if the stream is tidal.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for TRO are the Lower James, Nottoway/Meherrin, Blackwater, Dismal Swamp and points south and east, Chesapeake Bay, and Eastern Shore.
7. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
Lower James	0.0626
Nottoway/ Meherrin	0.000132
Blackwater	0.0
Dismal Swamp	0.0
Chesapeake Bay	0.0
Eastern Shore	0.0758

5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.
6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
Lower James	4.95
Nottoway/ Meherrin	2,348
Blackwater	----
Dismal Swamp	----
Chesapeake Bay	----
Eastern Shore	4.09

The runoff rates for each basin were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". The publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by TRO's borders was used in establishing the runoff rates for the basin. For example, there are 24 low flow sites listed in the publication where a 7Q10 value was provided for a stream in the Nottoway/Meherrin River Basin. Of the 24, 6 lie within the TRO's borders. The runoff rates were determined for each of the 6 sites in TRO and an average runoff rate was calculated for the Nottoway/Meherrin Basin. The same procedure was used to establish the runoff rates for the remaining basins in TRO with one exception. The Dismal Swamp Basin and the area south and east did not have any sites listed in the publication. Due to the swampy and/or tidal nature of this portion of the State, the runoff rate was set to 0.0 cfs/mi².

The runoff rates listed above for the basins lying wholly or partially within TRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - VRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: April 2, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for VRO are the North Fork Shenandoah, South Fork Shenandoah, Shenandoah, Rappahannock, and James. Discharges to the Upper Potomac should be included in the North Fork Shenandoah.
4. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:
5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
N.F. Shenandoah	0.0861
S.F. Shenandoah	0.0255
Shenandoah	0.1404
Rappahannock	0.0183
James	0.0661

6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
N.F. Shenandoah	3.60
S.F. Shenandoah	12.2
Shenandoah	2.21
Rappahannock	16.9
James	4.69

The runoff rates for each basin were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". This publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by VRO's borders was used in establishing the runoff rates for the basin. For example, there are 69 low flow sites listed in the publication where a 7Q10 value was provided for a stream in the James Basin. Of the 69, 15 lie within the VRO's borders. The runoff rates were determined for each of the 15 sites in VRO and an average runoff rate was calculated for the James Basin. The same procedure was used to establish the runoff rates for the remaining basins in VRO. Discharges to streams in a basin not listed above will be handled on a case-by-case basis.

The runoff rates listed above for the basins lying wholly or partially within VRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - WCRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: March 30, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for WCRO are the Yadkin, New, James, Roanoke, and Smith/Dan.
8. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
Yadkin	0.1567
New	0.1542
James	0.0736
Roanoke	0.0822
Smith/Dan	0.2557

5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.
6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
Yadkin	1.98
New	2.01
James	4.21
Roanoke	3.77
Smith/Dan	1.21

The runoff rates for each basin were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". This publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by WCRO's borders was used in establishing the runoff rates for the basin. For example, there are 15 low flow sites listed for the New River Basin in the publication. Of the 15, 5 lie within the WCRO's borders. The runoff rates were determined for each of the 5 sites in WCRO and an average runoff rate was calculated for the New Basin. The same procedure was used to establish the runoff rates for the remaining basins in WCRO with one exception. The Yadkin Basin is based on only one site due to the size of its watershed in Virginia.

The runoff rates listed above for the basins lying wholly or partially within WCRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: General Permit Development
Critical Drainage Area and Runoff Rate - NRO

TO: Lily Choi, OWPP

FROM: Paul E. Herman, P.E., WQAP

DATE: April 2, 2001

COPIES: Durwood Willis, File

When reviewing the vast number of VPDES General Permits to be reissued and stream flows are needed in order to establish effluent limits, the following procedures should be considered prior to assigning flow frequencies to the receiving stream.

1. Locate the discharge point(s) on the topo map(s) and determine whether the receiving stream is perennial (solid blue line), tidal (evidence of tidal flats on the topo), intermittent (dotted/dashed blue line), or a dry ditch (no blue line).
2. If the discharge is to an intermittent stream or a dry ditch the flow frequencies are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean. Use dilution ratios for discharges to tidal waters.
3. If the discharge enters a perennial stream, determine the major river basin to which the stream drains. The rivers considered as such for NRO are the Upper Potomac (HUC 02070008), Lower Potomac (HUC 02070010, 02070011), Upper Rappahannock, York, and James.
9. Once the river basin has been identified, determine the drainage area above the discharge point and multiply it by the runoff rate established for the basin. Basin runoff rates are listed below:

<u>River Basin</u>	<u>7Q10 Runoff Rate (cfs/mi²)</u>
Upper Potomac	0.0134
Lower Potomac	0.0061
Rappahannock	0.015426
York	0.015434
James	0.0131

5. Using the established runoff rates provides an estimate of the receiving streams **7Q10**.
6. For a critical flow of 0.2 MGD (0.31 cfs) a critical drainage area has been established for each basin and is listed below:

<u>River Basin</u>	<u>Critical Drainage Area (mi²)</u>
Upper Potomac	23.13
Lower Potomac	50.82
Rappahannock	20.096
York	20.086
James	23.66

The runoff rates for each basin were determined using data published in the USGS Water Supply Paper 2374 entitled "Low-Flow Characteristics of Streams in Virginia". The publication lists the low flow measurement sites in each basin and provides the sites drainage area and 2Q10 and 7Q10, and provides the continuous record gage used during the correlation.

The drainage area and 7Q10 for each low flow site in the portion of the basin encompassed by NRO's borders was used in establishing the runoff rates for the basin. For example, there are 25 low flow sites listed for the York River Basin in the publication. Of the 25, 14 lie within the NRO's borders. The runoff rates were determined for each of the 14 sites in NRO and an average runoff rate was calculated for the York Basin.

The runoff rates listed above for the basins lying wholly or partially within NRO may be used for estimating 7Q10 flows for VPDES General Permits whose receiving stream(s) lie within the specific basin. The material provided herein shall not be used for any purpose other than screening acceptability of VPDES General Permits for discharge flows less than or equal to 1000 gallons per day.

Change of Ownership Agreement Form

Note to Permittee: Please submit a completed copy of this form to your local Health Department and the DEQ Regional Office so that it is received AT LEAST 30 DAYS PRIOR TO A PROPERTY TRANSFER.

RE: Change of Ownership – General VPDES Permit VAG40 _____
For Domestic Sewage Discharges \leq 1,000 Gallons Per Day
Name of permitted facility: _____
County: _____

TO: Virginia Department of Environmental Quality
Regional Office Address

We, the undersigned, do hereby agree to the transfer of coverage, responsibility, and liability under the General VPDES Permit identified above, to be effective as of _____
Date*

Current Owner(s): I (We) hereby agree to the transfer of ownership modification to the referenced General VPDES Permit.

Printed Name: _____	Printed Name: _____
Address: _____	Address: _____
_____	_____
Telephone # () _____	Telephone # () _____
Signature: _____	Signature: _____
Date: _____	Date: _____

New Owner(s): I (We) hereby agree to the transfer of ownership modification to the referenced General VPDES Permit.

Printed Name: _____	Printed Name: _____
Address: _____	Address: _____
_____	_____
Telephone # () _____	Telephone # () _____
Signature: _____	Signature: _____
Date: _____	Date: _____

* Effective date of property transfer must be at least 30 days from the date this form is received at the DEQ Regional Office and the respective Health Department Office.

Coverage Renewal Reminder Letter

Regional DEQ Letterhead
Date

Owner's Name
Owner's Address

Re: General VPDES Permit No. VAG4000000[*insert individual discharge identification number*]
Facility Name
Facility Address

Dear Permittee:

This letter is to remind you that your General VPDES Permit coverage will expire on August 1, 2001. If you wish to continue discharging, you must receive coverage under the reissued general permit. The General VPDES Permit Regulation requires that a complete registration statement be filed prior to August 1, 2001. Early submissions are welcome and will better enable us to complete processing before permit expiration. The registration statement and instructions are enclosed. Note a copy of a valid maintenance contract must be attached with the complete registration statement. If you would like to request an exception to the maintenance contract requirement, please submit an Operation and Maintenance Plan with the registration statement to DEQ for review and approval. Coverage under the general permit cannot be issued until the Plan is approved. Also note that the requirements under Section 8 do not apply to any facility such as yours that seeks coverage renewal.

Please contact this office if you have any questions.

Sincerely,

Water Permit Manager

Enclosures

(Note to Permit Writers-Include with this letter a copy of registration statement and instructions)

VDH Division of Wastewater Engineering Area Engineers

Southwest Area (SWA)

Daniel Scott, P.E.
454 East Main Street
Abingdon, VA 24210
Phone: 540/646-3577
Fax: 540/646-3172
E-Mail: DPSCOTT@VDH.STATE.VA.US
Area Served:
Lee, Scott, Dickinson, Buchanan, Russell,
Washington, Wise, Bland, Giles, Wythe, Smyth,
Grayson, Carroll, Pulaski, Tazewell, Montgomery,
Floyd

Western Area (WA)

John Schofield, P.E.
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Lexington, VA 24450
Phone: 540/463-1642
Fax: 540/463-3892
E-Mail: JSCHOFIELD@VDH.STATE.VA.US
Area Served:
Bath, Highland, Rockbridge, Augusta, Rockingham,
Shenandoah, Page, Warren, Frederick Clarke

West Central Area (WCA)

Marcia J. Degen, PhD., P.E.
P.O. Box 21534
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Phone: 540/562-3500
Fax: 540/562-3661
E-Mail: MDEGEN@VDH.STATE.VA.US
Area Served:
Craig, Patrick, Franklin, Roanoke, Botetourt,
Alleghany, Bedford, Amherst, Appomattox, Campbell,
Pittsylvania, Henry

Northern Area (NA)

Rob Vanlier, P.E.
400 South Main Street - 2nd Floor
Culpeper, VA 22701-3318
Phone: 804/975-0897
Fax: 804/975-0893
E-Mail: RVANLIER@VDH.STATE.VA.US
Area Served:
Nelson, Fluvanna, Albemarle, Louisa, Spotsylvania,
Orange, Madison, Culpeper, Stafford, Rappahannock,
Fauquier, Prince William, Fairfax, Loudoun,
Arlington, Green

East Central Area (ECA)

Raymond "Reed" Barrows, P.E.
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Area Served:
Halifax, Mechlenburg, Charlotte, Lunenburg, Prince
Edward, Buckingham, Cumberland, Nottoway,
Amelia, Brunswick, Dinwiddie, Sussex, Prince
George, Surry, Chesterfield, Amelia, Powhatan,
Henrico, Hanover, Goochland, Caroline, King George,
Westmoreland, Northumberland, Lancaster,
Richmond, Essex, King and Queen, King William,
Charles City, New Kent, Greenville, Middlesex,
Mathews

Southeast Area (SEA)

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Area Served:
Southampton, Isle of Wight, Suffolk, Chesapeake,
Portsmouth, Virginia Beach, Hampton, York,
Gloucester, Newport News, Norfolk, Northampton,
Accomack, James City